Claims

1. An exhaust-gas cleaning system for cleaning the exhaust gas of an internal combustion engine, in particular an internal combustion engine with self ignition and/or with direct fuel injection, having at least one oxidizing catalytic converter, disposed in an exhaust conduit of the engine, and having at least one device, disposed downstream of the oxidizing catalytic converter for the selective catalytic reduction of the exhaust gases, characterized by a delivery device (6), integrated with the at least one oxidizing catalytic converter (4), for delivering a reducing agent (61) into the exhaust-gas stream (32) of the engine (2).

2. The exhaust-gas cleaning system of claim 1, characterized in that the delivery device (6) has a nozzle (62) for atomizing the reducing agent (61).

3. The exhaust-gas cleaning system of claim 1 or 2, characterized by a mixing device (63), downstream of the delivery device (6), for distributing the reducing agent (61) in the exhaust-gas stream (32).

4. The exhaust-gas cleaning system of claim 2 or 3, characterized in that an outlet of the nozzle (62) is disposed approximately centrally in the oxidizing catalytic converter (4).

5. The exhaust-gas cleaning system of claim 2 or 3, characterized in that the outlet of the nozzle (62) is disposed in an outer peripheral region of the oxidizing catalytic converter (4).

6. The exhaust-gas cleaning system of one of the foregoing claims, characterized in that the at least one oxidizing catalytic converter (4), with the delivery device (6) integrated with it, has a first housing (43); and that the device for selective catalytic reduction (8) has a second housing (81) adjoining the first.

7. The exhaust-gas cleaning system of one of claims 1 through 5, characterized in that the at least one oxidizing catalytic converter (4) and the device for selective catalytic reduction (8) have a common housing (10).

8. The exhaust-gas cleaning system of one of the foregoing claims, characterized in that upstream of the at least one oxidizing catalytic converter (4) in the exhaust-gas stream (32) of the engine (2), at least one further oxidizing catalytic converter (41) is disposed.

9. The exhaust-gas cleaning system of claim 8, characterized in that the at least one further oxidizing catalytic converter (41) is disposed in the immediate vicinity of the combustion chambers of the engine (2).

10. The exhaust-gas cleaning system of claim 8 or 9, characterized by one further oxidizing catalytic converter (41) each on each exhaust gas outlet (29) from each combustion chamber of the engine (2).

11. A method for cleaning exhaust gases of an internal combustion engine, in particular an internal combustion engine with self ignition and/or with direct fuel injection, in which an exhaust-gas stream is carried through at least one oxidizing catalytic converter disposed in the exhaust conduit and at least one device, downstream of the oxidizing catalytic converter, for selective catalytic reduction, characterized in that a reducing agent (61) is delivered to the exhaust-gas stream (32) inside the at least one oxidizing catalytic converter (4).

12. The method of claim 11, characterized by a delivery and/or atomization of the reducing agent (61) by means of a nozzle (62).

13. The method of claim 11 or 12, characterized by a delivery of the reducing agent (64) approximately centrally inside the oxidizing catalytic converter (4).

14. The method of claim 11 or 12, characterized by a delivery of the reducing agent (61) eccentrically inside the oxidizing catalytic converter (4).

15. The method of one of claims 11 through 14, characterized in that the exhaust-gas stream (32) is carried through at least one further oxidizing catalytic converter (41) upstream of the first oxidizing catalytic converter (4).

16. The method of one of claims 11 through 15, characterized in that the exhaust-gas stream (32) is carried through at least one further oxidizing catalytic converter (41) each in each exhaust conduit (29) immediately downstream of the combustion chambers of the engine (2).